Please amend the claims as indicated on the attached pages showing the claims as amended and in clean form together with new claims.

REMARKS

The Examiner has objected to the specification as failing to provide proper antecedent basis for certain claimed subject matter.

It is the applicant's position that the matters addressed by the Examiner do, in fact, have a proper antecedent basis with the exception of one item in claim 20 and since the claim has been cancelled, the issue is moot.

The phrase having the proportions of 15 to 30% in claim for has a basis in line 3 of the fourth paragraph of page 5 but the correct proportion was 10% to 35% as indicated in the changed claim. Likewise, claims 5 and 10 have been amended to read 15% to 25% as stated in line 5 of the fourth paragraph on page 5.

The phrase 10% of polyvinyl acetate in claims 15 and 18 has a proper antecedent basis in line 3 of the third paragraph on page 3 of the specification.

The phrase noting the range of polyvinyl acetate in claim 19 as 0 to 20% has a proper antecedent basis in line 5 of paragraph 3 on page 3 of the specification.

Claims 3,4,5,7,10,11,13,14,16and 17 and their dependants were rejected under 35 U. S. C. 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter regarded as the invention. All these claims have been amended and now the objectional portions have either been deleted or corrected as noted in the separate sheet of amended claims.

The Examiner has rejected initial claims 1-13, 16 and 20 as unpatentable under 35 U. S. C. 103(a) over the Japanese reference 2000080356. This reference is unrelated to what applicant has invented. The Japanese disclosure speaks of a spray agent for preventing coal dust formation in outdoor coal storage yards which consists of an ethylene-vinyl acetate copolymer emulsion with a synthetic wax therein. It later mentions paraffin wax. The Examiner admits that the Japanese reference does not speak of the optimum range nor does it teach the claimed method. It is urged that these The Japanese reference is made positions are not well taken and are not sustainable. The instant invention has from 0 to 20 primarily of ethylene vinyl acetate copolymer. % polyvinyl acetate. The Japanese reference is not a chemical change agent nor does it speak of such use...it is not contemplated. Again, the Japanese reference is merely an ethylene vinyl acetate copolymer emulsion. It is a binder formed by the use of the This material forms a film that is strong enough to glue to bind the ores Conversely, the instant invention has a purpose to chemically change the This is not just a surface treatment. chemical bond structure inherent to coals. Accordingly, the rejection based on the Japanese reference should be withdrawn as inapplicable.

The Examiner has rejected claims 1-11 and 13-15 under 35 U.S.C.103(a) as being unpatentable over Borenstein. The Examiner states that Borenstein teaches an aqueous emulsion comprising paraffinic was, monan wax and polyvinyl alcohol. He goes on to state that the water makes up from 35 to 85% of the composition which also contains alkali metal or amonimum hydroxides stabilizers. He continues by reciting that the polyvinyl alcohol is at least 90% hydrolyzed polyvinyl acetate. The Examiner admits that Borenstein does not teach applicant's intended use but says it makes no difference in The Examiner also admits that Borenstein does not teach the a composition claim. claimed method but says it would be "reenable" (sic, perhaps "reasonable"?) to expect that the composition of Borenstein would assist complete combustion of the material since the methods steps are the same?? He further states that a "skilled artisan" would recognize how toeither apply the composition..or obtain applicant's result?....it is not It is noted that Borenstein's patent is for an additive for a gypsum composition, namely, an emulsion to improve the water resistance of gypsum compositions. He does not mention coal and the Examiner admits this. Neither does Borenstein discuss chemical change in the bonds of the material. At best, it is a former of films that is incorporated into a mixture of chemicals that make up gypsum products. While there may be some innocent similarity the differences in applicant's composition are what is necessary to provide the changes in the FTIR reading to meet IRS Code Section 29 When coal is treated with the instant invention it becomes dealing with synthetic fuels. a "synthetic fuel" under the definition. Borenstein does not contain polyvinyl acetate which is in the instant invention. Further, Borenstein requires the use of hydrolyzed

polyvinyl acetate (90% hydrolyzed) which is not required in the instant invention.

Thus it is seen that the composition of Borenstein would not work in the same way as the instant invention.

As far as the other references cited are concerned, the Bennet patent is for a material to be sprayed on coal and coke to reduce dust therein. The material used is a lignosulfaonate compound which is not present in the instant invention. Bennett does not discuss chemical change. Ranke's patent is directed to a blend of chemicals, not an emulsion and the properties are not similar. Consequently, neither Bennett or Ranke are applicable.

The new claims 21-23 distinguish from the art of record and are fully supported in the specification and present a condensed version of the synfuel additive. The claims as amended continue to define over the prior art as claim 1 calls for facilitation of chemical bonding, something not contemplated by the prior art. The exact percentages have been amended in claims 4, 5, 10, 18 and 19. Claims 2 and 20 have been cancelled. Claim 13 has had the part of the Code of Federal Regulations added to it to make it definite.

Two checks are submitted herewith, one for the amount for a small entity Request for a Three Month Extension of Time in Which to Respond and a check for one additional independent claim represented by claim 21.

It is requested that the Mail Room deposit the self-addressed stamped post card with the Postal Service after stamping it with their receipt stamp.

It is also requested that the Examiner call the undersigned before acting on the application in order to arrange for an interview with the undersigned and the inventor.

Accompanying this Response is a Request for an Additional Three Months in which to respond to the Office action of January 2002.

Respectfully Submitted,

James W. Hiney

Attorney for Applicant

Reg. No. 24,705

1872 Pratt Drive, Suite 1100

Blacksburg, VA 24060

(540) 552-4400

Certification of Mailing

I, James W. Hiney, do hereby certify that an executed copy of this Response, together with a Request for a Three Month Extension of Time in Which to Respond, and two checks, were deposited, Express Mail Postage Prepaid, with the United States Postal Service, this 24th day of June, 2002.

James W. Hiney